

**METHOD OF CONTROLLING LOCALIZED SHAPE OF A DATA
HEAD AND FOR CHARACTERIZING THE SHAPE**

ABSTRACT OF THE DISCLOSURE

5 A method and apparatus are provided characterizing the shape of
a surface such as a bearing surface on a slider and for processing the
shape. The shape is characterized by fitting a curve having a desired
shape to measurement data and then determining residual deviations
from the desired shape within localized regions. The surface is
10 processed by selecting a material stress pattern to be applied to a
working surface of the slider based on measured and desired contour
shape parameters in a plurality of localized areas on the bearing surface.
The measured contour shape parameter within a first of the plurality of
localized areas is weighted more heavily than those within the other
15 localized areas.